

AMENDMENTS TO THE CLAIMS

1. (currently amended) A multistage process for the continuous production of an emulsion, the process comprising subjecting at least two immiscible liquids to a sequence of at least two mixing stages carried out in at least two successive stator-rotor devices comprising at least one rotor disk, the at least one rotor disk having a peripheral velocity, in which processwherein:
 - a peripheral outlet from a first stator-rotor device is connected to an axial inlet in thea successive stator-rotor device by means of a duct in which the Reynolda Reynolds number Re_T inside said duct is higher than 5000, and
 - the peripheral velocity of each rotor of said stator-rotor devices ranges from 5 to 60 m/s.
2. (original) The process according to claim 1, wherein said emulsion comprises, as a dispersed phase, a molten adduct of magnesium dihalide-Lewis base.
3. (currently amended) The process according to ~~claims 1-2~~claim 2, wherein said emulsion comprises, as a continuous phase, any liquid which is inert and immiscible with said molten adduct of magnesium dihalide-Lewis base.
4. (original) The process according to claim 3, wherein said inert and immiscible liquid is selected from aliphatic and aromatic hydrocarbons, silicone oils, liquid polymers or mixtures of said compounds.
5. (currently amended) The process according to any of claims 1-4claim 2, wherein said molten adduct of magnesium dihalide-Lewis base is fed to said first stator-rotor device at a weight ratio of less than 0,50,5 with respect to said inert and immiscible liquid.
6. (currently amended) The process according to any of claims 1-5claim 1, wherein in each mixing stage thea residence time is of less than 1 second.
7. (currently amended) The process according to claim 1, wherein the peripheral velocity of eachthe at least one rotor disk is comprised in the range from 20 to 60 m/sec.
8. (currently amended) The process according to claim 1, wherein the ReynoldReynolds number Re_T inside said duct is higher than 8000.
9. (currently amended) The process according to any of claims 1-8claim 1 comprising a sequence of three mixing stages.
10. (currently amended) The Processprocess according to any of claims 1-9claim 2, wherein said

magnesium dihalide is magnesium chloride.

11. (currently amended) The process according to ~~any of claims 1-10~~claim 2, wherein said Lewis base is selected from amines, alcohols, esters, phenols, ethers, polyethers, aromatic or aliphatic (poly)carboxylic acids.
12. (original) The process according to claim 11, wherein said Lewis base is an alcohol of formula ROH, in which R is an alkyl group containing from 1 to 10 carbon atoms.
13. (currently amended) The process according to ~~any of claims 1-12~~claim 2, wherein ~~at the~~ molten adduct ~~of formula~~is $MgCl_2 \cdot mROH \cdot nH_2O$ ~~is used~~, wherein $m=0.1-6.0$, $n=0-0.7$ and R= alkyl group C₁-C₁₀.
14. (original) The process according to claim 13, wherein $m=2.0-4.0$, $n=0-0.4$ and R= ethyl group.
15. (currently amended) An apparatus for the continuous production of an emulsion comprising at least two stator-rotor devices comprising a rotor, a stator, an axial tolerance between the rotor and corresponding stator, a radial tolerance between a circumference of each rotor and the corresponding stator, the rotor comprising a circumference, a rotation axes, a first side and a second side, each stator except the last being connected with the successive stator by a duct comprising an initial portion and an end portion, the duct extending from a peripheral outlet in ~~the~~a first stator to an axial inlet in ~~the~~a successive stator.
16. (original) The apparatus according to claim 15, wherein the initial portion of said duct is oriented in a direction substantially tangential to the circumference of each rotor.
17. (currently amended) The apparatus according to ~~claims 15-16~~claim 15, wherein the end portion of said duct is oriented in a direction substantially parallel to the rotation axes of each rotor.
18. (currently amended) The apparatus according to ~~any claims 15-17~~claim 15, wherein said duct is shaped as a spiral.
19. (currently amended) The apparatus according to ~~any of claims 15-18~~claim 15, wherein each rotor is perforated by ~~one or more holes~~at least one hole allowing the emulsion to pass from ~~one~~the first side to ~~the other~~the second side of said rotor.
20. (currently amended) The apparatus according to ~~any of claims 15-19~~claim 15, wherein the axial tolerance between each rotor and the corresponding stator is from 0.1 to 2.0 mm.
21. (original) The apparatus according to claim 20, wherein said axial tolerance is from 0.2 to

1.2 mm.

22. (currently amended) The apparatus according to ~~any of claims 15-21~~claim 15, wherein the radial tolerance between the circumference of each rotor and the corresponding stator is from 0.2 to 5.0 mm

23. (currently amended) The apparatus according to claim 22, wherein said radial tolerance is from 0.5 to 2.0 mm.